DOCUMENT RESUME

ED 472 691 SP 041 339

TITLE	State Incentive Programs for Recruiting Teachers: Are They Effective in Reducing Shortages? Issues in Brief.
INSTITUTION	National Association of State Boards of Education, Alexandria, VA.
ISBN	ISBN-1-58434-055-X
PUB DATE	2002-10-00
NOTE	13p.
AVAILABLE FROM	National Association of State Boards of Education, 277 South Washington Street, Suite 100, Alexandria, VA 22314 ($6). Tel: 703-684-4000; Tel: 800-220-5183 (Toll Free); Fax: 903-836-2313; e-mail: boards@nasbe.org; Web site: http://www.nasbe.org.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	Elementary Secondary Education; *Incentives; *State Programs; *Teacher Certification; *Teacher Recruitment; *Teacher Shortage

ABSTRACT

This issue brief presents an overview of the teacher shortage problem nationwide, examining incentive programs that states have developed in response. It details the serious shortcomings that can be found in these approaches, examining state-level data collected from all 50 states and the District of Columbia based on a survey administered to the heads of teacher licensing in each state department of education or licensing board. Respondents were surveyed by mail during the summer of 2001, with follow-up telephone calls during the summer and fall of 2001. Information gathered in the survey was based on the 2000-01 school year and was state-reported only. Results showed a consistent disconnect between the shortage areas states identified and the incentive programs they adopted. For example, 35 states reported shortages of special educators, yet only 4 had problems aimed at steering teachers toward special education. Few states were gathering reliable data on how many people the programs were recruiting and exactly where the recruits ended up. Key recommendations to enhance states' ability to identify and address shortfalls in the teacher workforce are included. (Contains 23 references.) (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 472 691

Issues in Brief
National Association of State Boards of Education ■ October 2002

STATE INCENTIVE PROGRAMS FOR RECRUITING TEACHERS

Are They Effective in Reducing Shortages?

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

B.A. Wellburn

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NASBE
NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

BEST COPY AVAILABLE

SP041 339

Issues in Brief

National Association of State Boards of Education • October 2002

Copyright ©2002 by the National Association of State Boards of Education. All rights reserved. ISBN 1-58434-055-X.
Additional copies of this Issue Brief are available for $6 each plus 10% for shipping and handling ($4.50 minimum) from NASBE at 277 South Washington Street, Suite 100, Alexandria, VA 22314. All orders under $50 must be prepaid. Call 800.220.5183 for more information.

STATE INCENTIVE PROGRAMS FOR RECRUITING TEACHERS

Are They Effective in Reducing Shortages?

by Lori Meyer

INTRODUCTION

As states scramble for innovative ways to lure teachers to their K-12 classrooms, many are turning to financial incentives designed to make teaching more attractive. The programs vary, but most involve college scholarships, forgiveness from undergraduate loans, or signing bonuses.

In recent years, the investment in these programs has grown considerably. A 1999 study found states offering nearly $100 million in such incentives—and when the amount that local school districts and the federal government spend each year is included, the figure is much higher.[1] New data indicate that state spending on incentives has jumped to almost $217 million.

Despite the large sums being spent on these incentive programs, however, not much is known about them. Nor is it clear to what extent they are helping to ease the teacher shortage. Considering the magnitude of this shortage and the amount of money at stake, a closer look is needed.

This *Issue Brief* presents an overview of the teacher shortage problem across the country today and then examines the incentive programs states have developed in response. The *Brief* then details the serious shortcomings that can be found in the approaches that have been taken, and finally identifies several key recommendations that can enhance states' ability to identify, and address, shortfalls in the teacher workforce.

Data for this *Issue Brief* are derived from a survey of the state heads of teacher licensure across the country. As part of this survey, the states were asked whether they have identified areas in which there are teacher shortages and what those areas are. And each state was asked whether it has incentive programs for teacher recruitment.

The study found a consistent disconnect between the shortage areas states have identified and the incentive programs they have adopted. For example, 35 states say they have a shortage of special education teachers, yet only four have programs aimed at steering teachers into that field.

At the same time, few states are gathering and collecting reliable data as to how many people these programs are recruiting, and exactly where those recruits end up. As a result, it is by no means clear whether incentive programs are actually helping to ease the shortage.

STUDY METHODOLOGY

This *Issue Brief* examines state-level data collected from all 50 states and the District of Columbia based on a survey administered to the heads of teacher licensing in each state department of education or licensing board. Respondents were surveyed by mail during the summer of 2001, with follow-up phone calls during the summer and fall of 2001. Information gathered in the survey is based on the 2000-2001 school year and is state-reported only. No other means were used to gather data on state-level shortages or incentive programs.

BEST COPY AVAILABLE

THE PROBLEM

There is no single answer as to why many schools across the country have teaching vacancies. Several forces combined are causing what is often described as a crisis. First, estimates project that a large portion of the current teaching force will be eligible for retirement during the next decade.[2] At the same time that the teaching force is shrinking, the school-age population is growing, resulting in a demand for more teachers. According to the U.S. Department of Education, school-age enrollment will peak at nearly 53 million students by 2005,[3] up from over 44.6 million in 1995.[4]

More recent research is also beginning to examine the effects of class-size reduction policies on the teaching force. As schools work to improve student-to-teacher ratios, the result is often an added burden on maintaining a high-quality teaching force.

Perhaps the most dominant factor when examining teacher shortages, however, is attrition. Roughly one in five newly hired teachers leave the field within their first three years of entering the classroom.[5] Other researchers suggest much higher figures, reporting 29 percent of teachers leave after three years and 39 percent leave after five years.[6] Even more pronounced is the exodus from urban districts. According to the American Federation of Teachers (AFT), 50 percent of newly minted teachers working in urban schools never make it to their fourth year.[7]

ADDITIONAL STRAINS

Each year, U.S. colleges and universities award more than 100,000 bachelor's degrees in education, a figure that should provide a more than adequate supply.[8] In addition, recent trends indicate a sharp rise in the number of people studying to become teachers—an increase of 49 percent from 1983 to 1999.[9]

Despite these promising figures, the true picture is much more complex. Some states with a large number of teacher-training institutions prepare an abundance of teachers, in fact, more than these states can hire.[10] Other states have few teacher-training programs, no aggressive recruitment strategies, and no reciprocity arrangements for licensing. These geographic irregularities result in a problem of distribution—getting prospective educators from where they have been trained to the regions of the country where they are needed most.

Further complicating the picture is the fact that wealthier districts, which provide higher salaries and better working conditions, rarely experience shortages.[11] At the other end of the spectrum, high-poverty districts often pay less and are seen as less attractive places to work.

At the same time, the education pipeline itself is by no means a perfectly functioning system. Many of those who are trained to teach never enter the classroom, for a variety of reasons.[12] About 22 percent of graduates who majored in education do not teach the year following graduation. Fifty-one percent of those who had planned to enter the profession, regardless of major, did not even apply for teaching jobs following graduation.

In addition, teaching often commands much lower salaries, and results in lower esteem, than other professions. Some subject fields, notably mathematics, physical science, special education, and bilingual education, have chronic shortages, mostly because the knowledge and skills needed to teach those subjects command much higher salaries in fields outside of education.[13]

In 1999, researchers at *Education Week* used U.S. Census Bureau data to compare the annual earnings of public and private teachers with other college graduates, and found that teachers are paid less on average per year.[14] For teachers with at least a bachelor's degree the average salary was $35,048. For others outside of the teaching field who had earned at least a bachelor's degree, the average salary jumped to $49,362. Even more striking is the fact that that as teachers got older and acquired more education, the gap became even wider. Teachers with a master's degree earn, on average, $40,703, while other professionals with a master's make far more: $63,483.

Meanwhile, as the population of minority students is growing, the proportion of minority teachers lags far behind. In 1993-94, the black, non-Hispanic population made up 16 percent of students, but only 9 percent of teachers.[15] In addition, the nation continues to see an increase in school-aged children who live in a home where English is not the primary language. As many as 2.3 million children fall into this group.[16] Yet more than two-thirds of urban districts responding to a 1999 survey reported an immediate need for bilingual and English as a second language (ESL) teachers, and more than 80 percent of the districts were permitting noncertified teachers to teach in this area.[17]

INCENTIVES AS A RECRUITMENT TOOL

As incentive programs have proliferated as a policy response to teacher shortages, college scholarships, loan forgiveness, and signing bonuses have become the most popular.

Little research, however, has been conducted to determine the effectiveness of these and other incentives. Many states have difficulty simply tracking the number of recruits from the various programs, which leaves no possibility for evaluation and corrective action.

States that do collect such data are able to respond quickly and make improvements. A recent state audit of a Missouri scholarship program, for example, found

that nearly 40 percent of the students who participated either never became teachers or failed to complete the required five years of service in a classroom.[18] Armed with that information, the state board of education was able to retool the program with a focus on more career-minded students.

In another evaluation, R. Clarke Fowler, a professor at Salem State College, evaluated the Massachusetts "bonus babies" program and found several shortcomings.[19] The program provided a $20,000 bonus paid out over four years to career-switchers who were willing to teach in a public school in Massachusetts. While supporters of the program claimed it would alleviate shortages in hard-to-staff schools, less than half of the 2000-2001 class taught in a high-need district. The overall attrition rate of those in the program was twice the national average for first year teachers—20 percent versus 9 percent—and in high-need districts the figure rose to 31 percent.

One program that has shown promising results is the North Carolina Teaching Fellows initiative.[20] The program annually awards 400 high school seniors scholarship/loans of $26,000 ($6,500/year for four years) to become teachers. The prospective teacher is then required to teach in a North Carolina school for four years, or three years in a state-designated low-performing school. The program has been hailed for increasing the supply of minority teachers, as well as educators in key subject areas like mathematics and science. Evaluations of the programs also showed that principals give high marks to teachers who go through the program.[21]

WHAT ARE THE SHORTAGES?

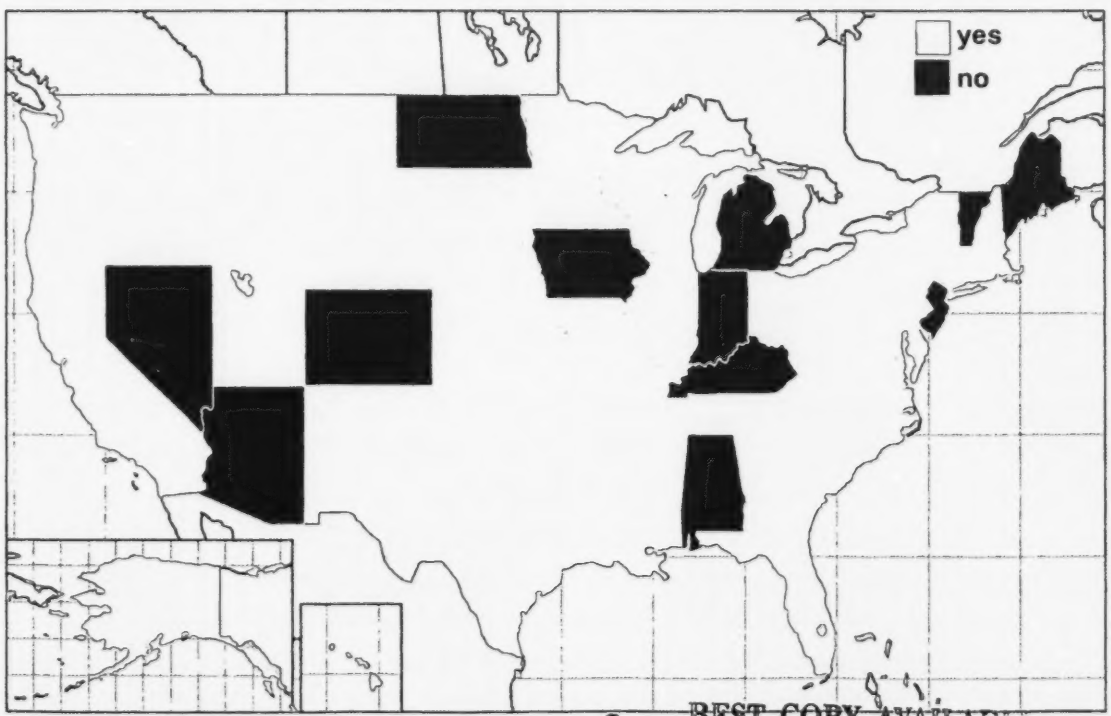
All of the policy discussions on teacher shortages hinge on good data collection, which is the key to a better understanding of staffing needs. More than a decade ago, leading researchers were urging states to collect data over time and focus on actual counts of teachers, projections of shortages, turnover, and new additions to the teaching force.[22] More recently, a researcher at NCREL also concluded that outside of a few national data sources, most data at the state level are still not detailed enough.[23]

Yet the survey of the 50 states and the District of Columbia conducted for this *Issue Brief* found that 12 do not gather any data on staffing needs at a statewide level. And, for those few that provided staffing reports, the quality varied greatly.

Of the 39 states that do collect statewide data on staffing needs, nearly all reported shortages based on geography (e.g., rural areas, or districts that border another state). Thirty-five states reported a need for special education instructors, while the need for bilingual,

State data collection

Does your state collect information on staffing needs in schools?



BEST COPY AVAILABLE

math, and science teachers was almost as widespread. Twenty-seven states said they needed minority teachers. Also of interest were the number of states reporting shortages in the humanities. For example, a quarter of those states collecting data on shortages reported a need for music teachers.

State-Reported Shortage Areas

(N=39 States)

Shortage Category	No. of States	Mean Level of Need*
Geographic Region	36	3.67
Bilingual	30	3.47
Minority	27	3.67
Hard-to-Staff	16	3.94
Subject-Area Mentions:		
Math	31	3.77
Science	30	3.77
Foreign Language	14	3.79
Music	10	3.40
Art	5	3.20
Language Arts	5	3.40
Theater	3	3.33
Home Economics	2	3.50
Social Studies	2	2.00
English	1	2.00
Health	1	4.00
Physical Education	1	2.00
Other Mentions:		
Special Education	35	3.94
Elementary	5	3.00
Early Childhood	1	4.00
Middle Grades	1	4.00

*Shortage Areas: 4=Great Need; 3=Moderate Need; 2=Little Need; 1=No Need

STATE-FUNDED INCENTIVE PROGRAMS

Nineteen states and the District of Columbia reported having at least one (see chart on page five) incentive program to recruit teachers. One state, Florida, offered as many as six programs during the 2000-2001 school year. States offered a total of 48 different incentives that were designed to address staffing needs.

It is evident from our study that state spending on financial incentive programs continues to grow. In 1999 states reported spending nearly $100 million on such programs. By 2001 that figure jumped to almost $217 million. Leading the way in funding at $133.6 million was California, accounting for more than half the money spent nationwide on incentives to recruit teachers in 2000-2001. The state has increased funding for such programs by more than $120 million since 1998-1999, when officials reported funding of just under $13 million. The bulk of the new money was for the Teaching as a Priority program, which provided funds for low-performing schools to recruit and retain credentialed teachers. The program allowed local schools to decide how to spend the funds.

A majority of the states that reported funding levels for the 2000-2001 school year said they spent less than $1 million. However, the variance among states is substantial, and other states spend far more than that. Ohio reported spending only $100,000 on a recruitment program aimed at helping teachers earn an endorsement in reading. Maryland, on the other hand, allocated nearly $47 million for four programs. The bulk of that funding—$40 million—was set aside for low-interest mortgage rates for specific areas such as Baltimore.

The number of recruits acquired through incentive programs is more difficult to gauge. In 1999 states reported recruiting 28,000 teachers, while in 2001 states reported recruiting 14,000 educators. A number of states, most notably California and Florida, were unable to provide the number of recruits in 2001, therefore it is expected that this number would increase.

HOW ON-TARGET ARE INCENTIVES?

Of the 48 different incentives that were designed to address staffing needs, 35 (73%) of the programs were targeted. However, in general, there is a mismatch between the areas of greatest need and the target audience of most of the incentives. (See chart on page 6.)

The most common goal of incentives was to encourage certification in a state-defined shortage area. While technically these types of incentives are targeted, they tend to be broad-based, many times encompassing more than a dozen shortage areas, including both subjects and grade levels. Eight states had such programs, with Florida alone offering five different types of incentives aimed at state-defined shortage areas.

Seven incentive programs targeted minority candidates, which was mentioned as a need area by 27 states. However, four of these programs were offered in one state—Arkansas.

And while 36 states mentioned shortages based on geography, only four—Hawaii, Maryland, Mississippi, and New York—offered geography-based incentives. Similarly, 35 states mentioned either a moderate or a great need for special education teachers, yet only the District of Columbia, Florida, Oklahoma, and Vermont offered incentives that specifically targeted special education teachers.

In addition, several states reported no state-level data gathering on staffing needs, but still offered targeted programs for recruitment based on perceived shortage areas as defined by the state—despite the absence of solid statewide data. Another state reported offering no incentives or even gather-

BEST COPY AVAILABLE

States Offering Incentives to Recruit Teachers 2000-2001

(N=20 States)

State	Number of Incentive Programs	Total Funding	Total Number of Recruits
Arkansas	4	$837,500	401
California	3	$133,600,000*	No Answer
Connecticut	2	$541,500*	33*
District of Columbia	4	No Answer	No Answer
Florida	6	$5,065,543	No Answer
Georgia	3	No Answer	No Answer
Hawaii	1	No Answer	No Answer
Illinois	1	No Answer	No Answer
Iowa	1	$493,500	191
Louisiana	2	$845,000	1,061
Maryland	4	$46,600,000*	4,063*
Massachusetts	3	$5,690,000	1,510
Mississippi	3	No Answer	2,752
Missouri	2	$440,000	241
New York	2	$9,335,521*	2,731*
North Carolina	3	$12,052,000*	800*
Ohio	1	$100,000	100
Oklahoma	1	No Answer	No Answer
Vermont	1	$450,000	70
Virginia	1	$558,000	150
U.S. Total	48	$216,608,564	14,103

*State was unable to provide complete figures for each program.

ing data at the state level to gauge staffing needs in 2000-2001—yet in the spring of 2001 the legislature created a new program that provided loan forgiveness to those willing to teach in high need areas such as math, science, special education, and bilingual/ESL.

RECOMMENDATIONS

As stated above, these findings highlight a serious lack of information in many states about their teacher workforce needs, and in many cases little or no evaluation of the incentive programs they've adopted to address perceived shortages. To better coordinate workforce issues with incentive programs, and to ensure that money spent on such programs is having the desired effects, there are several steps states can take—recommendations that will leave policymakers better informed as to the most effective approaches.

□ States should increase their efforts to identify and evaluate teacher workforce needs. Some states do little to gauge staffing needs, while others consistently track shortages and aggressively recruit prospective candidates. States need to gather comprehensive data over time on teacher supply and demand in order to accurately gauge the shortage problem.

□ States should make a clear connection between identified shortage areas and efforts to address them. Often, the most frequently mentioned shortage areas did not correlate with the most frequently mentioned incentive targets. States that need bilingual or math teachers are not solving the problem with incentive programs that target teachers in general.

□ States should conduct research to evaluate incentive programs. Despite spending tens of millions of dollars on incentive programs, states have done little to determine whether these types of incentive programs are effective. States should be gauging whether or not individuals hired through these routes have similar attrition rates as other teachers, how well they perform, and how well their students perform. There is little doubt that incentives have a place in the market for school personnel. The important thing for states is to find out where the greatest need is, and then address it by using incentives in a very precise manner.

This Issue Brief *is taken from research that was originally produced as part of the author's Master of Policy Sciences thesis conducted at the University of Maryland, Baltimore County.*

BEST COPY AVAILABLE

Targeting of Incentives Based on Need

(N=20 States)

State	Number of Incentive Programs	Shortage Areas and Level of Need*	Number of Targeted Incentive Programs
Arkansas	4	Geography (4) Math (4) Science (4) Foreign Language (4) Bilingual (4) Minority (4) Hard-to-Staff (4) Special Education (4)	4 – Minority candidates
California	3	Geography (4) Math (4) Science (4) Reading (4) Hard-to-Staff (4) Special Education (4)	2 – Low-performing
Connecticut	2	Bilingual (4) Minority (4) Special Education (4) Geography (3) Math (3) Music (3) Foreign Language (3)	1 – State-defined shortage areas, priority district 1 – Minority candidates
District of Columbia	4	Bilingual (4) Special Education (4) Elementary (3)	1 – Special education, ESL, bilingual candidates 1 – Dual certification in special education and subject-area
Florida	6	Geography (4) Math (4) Science (4) Foreign Language (4) Bilingual (4) Minority (4) Special Education (4)	5 – State-defined shortage areas 1 – Special education
Georgia	3	Geography (4) Math (4) Science (4) Bilingual (4) Minority (4) Hard-to-Staff (4) Special Education (4)	1 – State-defined shortage areas
Hawaii	1	Geography (4) Math (4) Science (4) Hard-to-Staff (4) Special Education (4)	1 – Geographic region
Illinois	1	Geography (4) Minority (4) Special Education (4) Bilingual (3) Math (3) Science (3)	1 – State-defined shortage areas

*Shortage Areas: 4=Great Need; 3=Moderate Need; 2=Little Need; 1=No Need

BEST COPY AVAILABLE

State	Number of Incentive Programs	Shortage Areas and Level of Need*	Number of Targeted Incentive Programs
Iowa	1	No data collection	1 – State-defined shortage areas
Louisiana	2	Geography (4) Math (4) Science (4) Special Education (4) Early Childhood (4) Elementary (4)	1 – State-defined shortage areas
Maryland	4	Geography (4) Math (4) Science (4) Foreign Language (4) Art (4) Bilingual (4) Minority (4) Hard-to-Staff (4)	1 – Reconstituted/ reconstitution eligible/ challenge schools 1 – Geographic region
Massachusetts	3	Math (4) Hard-to-Staff (4) Science (3) Foreign Language (3) Reading (3) Bilingual (3) Minority (3) Special Education (3) Elementary (3) Geography (2)	0
Mississippi	3	Geography (4) Math (4) Science (4) Foreign Language (4) Minority (4) Special Education (4) Bilingual (2)	3 – Geographic region
Missouri	2	Geography (4) Minority (4) Hard-to-Staff (4)	1 – Minority candidates
New York	2	Geography (4) Math (4) Science (4) Bilingual (4) Minority (4) Hard-to-Staff (4) Special Education (4) Music (3) Art (3) Home Economics (3) English (2) Social Studies (2) Physical Education (2)	1 – Underrepresented candidates (including minority) 1 – State-defined shortage areas and regionally-defined shortage areas
North Carolina	3	Geography (4) Math (4) Science (4) Special Education (4) Middle School (4)	2 – Low-performing schools

*Shortage Areas: 4=Great Need; 3=Moderate Need; 2=Little Need; 1=No Need

State	Number of Incentive Programs	Shortage Areas and Level of Need*	Number of Targeted Incentive Programs
Ohio	1	Geography (4) Math (4) Science (4) Foreign Language (4) Minority (4) Special Education (4) Bilingual (3)	1 – Reading
Oklahoma	1	Music (4) Math (4) Science (4) Foreign Language (4) Minority (4) Special Education (4) Geography (3) Bilingual (3)	1 – Special education
Vermont	1	No data collection	1 – Special education
Virginia	1	Math (4) Science (4) Special Education (4) Geography (3) Foreign Language (3) Bilingual (3) Minority (3)	1 – State-defined shortage areas
U.S. Total	48	—	35

*Shortage Areas: 4=Great Need; 3=Moderate Need; 2=Little Need; 1=No Need

REFERENCES

[1] Education Week, *Who Should Teach?* (Bethesda, MD: Editorial Projects in Education, 2000).

[2] William J. Hussar, *Predicting the Need for Newly Hired Teachers in the United States to 2008-09* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1999).

[3] Debra E. Gerald and William J. Hussar, *Projections of Education Statistics to 2011* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001).

[4] National Center for Education Statistics, *Digest of Education Statistics, 2001* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001).

[5] Robin Henke, Xianglei Chen, and Sonya Geis, *Progress Through the Teacher Pipeline: 1992-93 College Graduates and Elementary/Secondary School Teaching as of 1997* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000).

[6] Richard M. Ingersoll, *A Different Approach to Solving the Teacher Shortage Problem* (The University of Washington: Center for the Study of Teaching and Policy, 2001).

[7] The American Federation of Teachers, *Assuring Teacher Quality: It's Union Work* (Washington, DC: AFT, 1998).

[8] C. Emily Feistritzer, "The Truth Behind the 'Teacher Shortage,'" *The Wall Street Journal*, 28 January 1998.

[9] C. Emily Feistritzer, *The Making of a Teacher* (Washington, DC: National Center for Education Information, 1999).

[10] Linda Darling-Hammond, *Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure a Competent, Caring, and Qualified Teacher for Every Child* (New York, NY: NCTAF, 2000).

[11] Linda Darling-Hammond, *Doing What Matters Most: Investing in Quality Teaching* (New York, NY: NCTAF, 1997).

[12] Robin Henke, Xianglei Chen, Sonya Geis, and Martha Naomi Alt, *America's Teachers: Profile of a Profession 1993-94* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1997).

[13] National Commission on Teaching & America's Future, *What Matters Most: Teaching for America's Future* (New York, NY: NCTAF, 1996).

[14] Education Week, *Who Should Teach?* (Bethesda, MD: Editorial Projects in Education, 2000).

[15] Robin Henke, Xianglei Chen, Sonya Geis, and Martha Naomi Alt, *America's Teachers: Profile of a Profession 1993-94* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1997).

[16] Elise McCandless, Robert Rossi, and Shannon Daugherty, *Are Limited English Proficient (LEP) Students Being Taught by Teachers with LEP Training?* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1996).

[17] Mari Ann Zehr, "Un Dia Nuevo for Schools," *Education Week*, 8 November 2000.

[18] "Many Who Got Teacher Scholarships Never Finished Requirements," *Jefferson City News Tribune*, 25 June 2002.

[19] R. Clarke Fowler, *An Analysis of the Recruitment, Preparation, Attrition, and Placement of the Massachusetts Signing Bonus Teachers* (Salem, MA: Salem State College, 2000).

[20] Linda Darling-Hammond, *Doing What Matters Most: Investing in Quality Teaching* (New York, NY: NCTAF, 1997).

[21] National Commission on Teaching & America's Future, *What Matters Most: Teaching for America's Future* (New York, NY: NCTAF, 1996).

[22] Gus Haggstrom, Linda Darling-Hammond, and David Grissmer, *Assessing Teacher Supply and Demand* (Santa Monica: RAND 1988).

[23] Sabrina Laine, "Where Are the Data: Issues of Educator Supply and Demand," *State Education Leader*, 18, 2 (2000): 22-23.

More NASBE Publications on the Teaching Profession and Related Topics

Moving Past the Politics: How Alternative Certification Can Promote Comprehensive Teacher Development Reforms examines the ideological debate between those who support the traditional path to teacher certification and those who promote a more open-market approach. This publication takes the viewpoint that alternative certification programs offer a way to develop a broader pool of prospective teachers while also helping state address concerns about teacher development, professionalism, and retention. Includes a state-by-state analysis of current alternative certification programs. (2002, 30 pp., $10.00)

The Full Circle: Building a Coherent Teacher Preparation System examines the critical issue of improving teacher preparation nationwide by more fully coordinating programs, policies, and standards across K-12 and higher education. Topics include coordinating K-12 and higher education to support high-quality teacher preparation; building linkages within higher education to support teacher preparation; building a coordinated system of new teacher support; and ensuring program results with an effective accountability system. (2000, 52 pp., $12.00)

Principals of Change: What Education Leaders Need to Guide Schools to Excellence examines the changing role of the principalship and provides recommendations on the reforms needed to ensure that every school has a well-qualified principal. Topics covered include the growing shortage of qualified principals; recruiting high-quality candidates; developing a standards-based vision for the principalship; dramatically improving principal preparation and professional development programs; ensuring that the best principals go to the schools that need them the most; and retaining good principals once they are on the job. (1999, 40 pp., $12.00)

The Numbers Game: Ensuring Quantity and Quality in the Teaching Work Force goes beyond the rhetoric of a national teacher shortage to look at the real problems in teacher quality, supply, and demand. Recommendations cover standards-based teacher preparation and licensure, enhanced recruitment programs, and strategies for retaining high-quality teachers. (1998, 48 pp., $12.00) **Note:** A new edition of *The Numbers Game*, examining the latest supply and quality data related to the teaching work force, will be available in February 2003.

State Reforms in Teacher Preparation, Licensure, and Professional Development. Based on NASBE's work in states, this *Brief* describes a model for teacher accountability that is grounded in standards-based licensure for educators. It also includes a detailed grid that gives specific guidance on the policies, structures, assessments, safeguards, and incentives that must be in place to build a comprehensive plan for teacher development. (1996, 24 pp., $7.50)

Ensuring a High Quality Teaching Work Force: Special Issue of the *State Education Standard*. Articles include Barnett Berry on alternatives in teacher preparation; Jon Snyder on New Haven, California's teaching quality system; teacher induction programs; retaining and recruiting the best teachers for urban schools; and many more. (Winter 2000, 48 pp., $10.00)

Teacher Quantity and Quality: A State and Regional Approach offers a multi-state perspective on problems related to teacher quality, supply, and demand and proposes five recommendations groups of states should consider in addressing these issues. (1999, 12 pp., $6.00)

Ordering information

To order by phone or for information on volume discounts, call NASBE Publications at 800-220–5183. Order online at www.nasbe.org. Or send a check to:

NASBE Publications
277 South Washington Street
Suite 100
Alexandria, VA 22314.

Shipping/Handling fees: Add 10% of order amount (minimum of $4.50).

BEST COPY AVAILABLE

The National Association of State Boards of Education is a nonprofit, private association that represents state and territorial boards of education. Our principal objectives are to strengthen state leadership in education policymaking; promote excellence in the education of all students; advocate equality of access to educational opportunity; and assure responsible lay governance of public education.

NASBE
NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

National Association of State Boards of Education
277 South Washington Street, Suite 100
Alexandria, Virginia 22314
Telephone: (703) 684-4000
Website: www.nasbe.org

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

X	This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
	This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").